



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/486,623B  
Source: 1600  
Date Processed by STIC: 5/14/2003

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MAY 22 2003

TECH CENTER 1600/2900

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PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202



1600

RECEIVED

MAY 22 2003

TECH CENTER 1600/2901

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

3 <110> APPLICANT: Nielsen, Peter E.  
 5 <120> TITLE OF INVENTION: Peptide Nucleic Acids Having Antibacterial Activity  
 7 <130> FILE REFERENCE: ISIS-3292  
 9 <140> CURRENT APPLICATION NUMBER: 09/486,623B  
 10 <141> CURRENT FILING DATE: 2000-07-06  
 12 <150> PRIOR APPLICATION NUMBER: 08/932,140  
 13 <151> PRIOR FILING DATE: 1997-09-16  
 15 <160> NUMBER OF SEQ ID NOS: 30  
 17 <170> SOFTWARE: PatentIn version 3.2  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 14  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Artificial Sequence  
 24 <220> FEATURE:  
 25 <223> OTHER INFORMATION: Synthetic construct  
 27 <400> SEQUENCE: 1  
 28 tgaccatgat tacg  
 31 <210> SEQ ID NO: 2  
 32 <211> LENGTH: 17  
 33 <212> TYPE: DNA  
 34 <213> ORGANISM: Artificial Sequence  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Synthetic construct  
 39 <400> SEQUENCE: 2  
 40 tacgtgtttc ctgtgtg  
 43 <210> SEQ ID NO: 3  
 44 <211> LENGTH: 17  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Artificial Sequence  
 48 <220> FEATURE:  
 49 <223> OTHER INFORMATION: Synthetic construct  
 51 <400> SEQUENCE: 3  
 52 gagtattcaa catttcc  
 55 <210> SEQ ID NO: 4  
 56 <211> LENGTH: 17  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Artificial Sequence  
 60 <220> FEATURE:  
 61 <223> OTHER INFORMATION: Synthetic construct  
 63 <400> SEQUENCE: 4  
 64 attgtcttcc tttttca  
 67 <210> SEQ ID NO: 5  
 68 <211> LENGTH: 15

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Does Not Comply  
Corrected Diskette Needed

14

17

17

17

## RAW SEQUENCE LISTING

DATE: 05/14/2003

PATENT APPLICATION: US/09/486,623B

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

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69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Synthetic construct
76 <220> FEATURE:
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78 <222> LOCATION: (1)..(14)
79 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)] glycine backbone
81 <220> FEATURE:
82 <221> NAME/KEY: misc_feature
83 <222> LOCATION: (15)..(15)
84 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
backbone
86 <400> SEQUENCE: 5
87 ggatcatagct gtttc 15
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 15
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93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Synthetic construct
99 <220> FEATURE:
100 <221> NAME/KEY: misc_feature
101 <222> LOCATION: (1)..(14)
102 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
104 <220> FEATURE:
105 <221> NAME/KEY: misc_feature
106 <222> LOCATION: (15)..(15)
107 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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109 <400> SEQUENCE: 6
110 tactcatact ctcc 15
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 15
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116 <213> ORGANISM: Artificial Sequence
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123 <221> NAME/KEY: misc_feature
124 <222> LOCATION: (1)..(14)
125 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
127 <220> FEATURE:
128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (15)..(15)
130 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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132 <400> SEQUENCE: 7
133 gaatactcat actct 15
136 <210> SEQ ID NO: 8
137 <211> LENGTH: 15
138 <212> TYPE: DNA

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## RAW SEQUENCE LISTING

DATE: 05/14/2003

PATENT APPLICATION: US/09/486,623B

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

139 <213> ORGANISM: Artificial Sequence  
 141 <220> FEATURE:  
 142 <223> OTHER INFORMATION: Synthetic construct  
 145 <220> FEATURE:  
 146 <221> NAME/KEY: misc\_feature  
 147 <222> LOCATION: (1)..(14)  
 148 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 150 <220> FEATURE:  
 151 <221> NAME/KEY: misc\_feature  
 152 <222> LOCATION: (15)..(15)  
 153 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine  
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 155 <400> SEQUENCE: 8  
 156 acgccacatc ttgcg 15  
 159 <210> SEQ ID NO: 9  
 160 <211> LENGTH: 15  
 161 <212> TYPE: DNA  
 162 <213> ORGANISM: Artificial Sequence  
 164 <220> FEATURE:  
 165 <223> OTHER INFORMATION: Synthetic construct  
 168 <220> FEATURE:  
 169 <221> NAME/KEY: misc\_feature  
 170 <222> LOCATION: (1)..(1)  
 171 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 173 <220> FEATURE:  
 174 <221> NAME/KEY: misc\_feature  
 175 <222> LOCATION: (2)..(4) *FYI: "n" can only represent a single nucleotide*  
 176 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 177 glycine backbone  
 179 <220> FEATURE:  
 180 <221> NAME/KEY: misc\_feature  
 181 <222> LOCATION: (5)..(6)  
 182 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 184 <220> FEATURE:  
 185 <221> NAME/KEY: misc\_feature *"n" can only represent a single nucleotide*  
 186 <222> LOCATION: (7)..(7)  
 187 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 188 glycine backbone  
 190 <220> FEATURE:  
 191 <221> NAME/KEY: misc\_feature *"n" can only represent a single nucleotide*  
 192 <222> LOCATION: (8)..(8)  
 193 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 194 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 195 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)  
 197 <220> FEATURE:  
 198 <221> NAME/KEY: misc\_feature  
 199 <222> LOCATION: (9)..(14)  
 200 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 202 <220> FEATURE:  
 203 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

DATE: 05/14/2003

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TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

204 <222> LOCATION: (15)..(15)  
 205 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)] -C-lysine-glycine  
 206 backbone  
 208 <400> SEQUENCE: 9  
**W--> 209 tnnnttnnct tccct** 15  
 212 <210> SEQ ID NO: 10  
 213 <211> LENGTH: 15  
 214 <212> TYPE: DNA  
 215 <213> ORGANISM: Artificial Sequence  
 217 <220> FEATURE:  
 218 <223> OTHER INFORMATION: Synthetic construct  
 221 <220> FEATURE:  
 222 <221> NAME/KEY: misc\_feature  
 223 <222> LOCATION: (1)..(1) *n can only represent a single nucleotide*  
 224 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 225 glycine backbone  
 227 <220> FEATURE:  
 228 <221> NAME/KEY: misc\_feature  
 229 <222> LOCATION: (2)..(4)  
 230 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 232 <220> FEATURE:  
 233 <221> NAME/KEY: misc\_feature  
 234 <222> LOCATION: (5)..(6) *n can only represent a single nucleotide*  
 235 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 236 glycine backbone  
 238 <220> FEATURE:  
 239 <221> NAME/KEY: misc\_feature  
 240 <222> LOCATION: (7)..(7)  
 241 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 243 <220> FEATURE:  
 244 <221> NAME/KEY: misc\_feature  
 245 <222> LOCATION: (8)..(8) *n can only represent a single nucleotide*  
 246 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 247 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 248 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)  
 250 <220> FEATURE:  
 251 <221> NAME/KEY: misc\_feature  
 252 <222> LOCATION: (9)..(14)  
 253 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 255 <400> SEQUENCE: 10  
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 259 <210> SEQ ID NO: 11  
 260 <211> LENGTH: 15  
 261 <212> TYPE: DNA  
 262 <213> ORGANISM: Artificial Sequence  
 264 <220> FEATURE:  
 265 <223> OTHER INFORMATION: Synthetic construct  
 268 <220> FEATURE:  
 269 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

270 <222> LOCATION: (1)..(14)  
 271 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 273 <220> FEATURE:  
 274 <221> NAME/KEY: misc\_feature  
 275 <222> LOCATION: (15)..(15)  
 276 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)]-C-lysine-glycine  
 277 backbone  
 279 <400> SEQUENCE: 11  
 280 cataactcttt ctcct 15  
 283 <210> SEQ ID NO: 12  
 284 <211> LENGTH: 25  
 285 <212> TYPE: DNA  
 286 <213> ORGANISM: Artificial Sequence  
 288 <220> FEATURE:  
 289 <223> OTHER INFORMATION: Synthetic construct  
 292 <220> FEATURE:  
 293 <221> NAME/KEY: misc\_feature Site  
 294 <222> LOCATION: (1)..(2)  
 295 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 297 <220> FEATURE:  
 298 <221> NAME/KEY: misc\_feature  
 299 <222> LOCATION: (3)..(3) n can only represent a single nucleotide  
 300 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 301 glycine backbone  
 303 <220> FEATURE:  
 304 <221> NAME/KEY: misc\_feature  
 305 <222> LOCATION: (4)..(4)  
 306 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone,  
 308 <220> FEATURE:  
 309 <221> NAME/KEY: misc\_feature n can only represent a single nucleotide  
 310 <222> LOCATION: (5)..(7)  
 311 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 glycine  
 312 backbone  
 314 <220> FEATURE:  
 315 <221> NAME/KEY: misc\_feature  
 316 <222> LOCATION: (8)..(10)  
 317 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 319 <220> FEATURE:  
 320 <221> NAME/KEY: misc\_feature n can only represent a single nucleotide  
 321 <222> LOCATION: (11)..(11)  
 322 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 323 glycine backbone  
 325 <220> FEATURE:  
 326 <221> NAME/KEY: misc\_feature  
 327 <222> LOCATION: (12)..(12)  
 328 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 329 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 330 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)  
 332 <220> FEATURE:

This applies to subsequent sequences.

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 05/14/2003  
PATENT APPLICATION: US/09/486,623B      TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt  
Output Set: N:\CRF4\05142003\I486623B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 2,3,4,7,8  
Seq#:10; N Pos. 1,5,6,8  
Seq#:12; N Pos. 3,5,6,7,11,13  
Seq#:13; N Pos. 1,3,5,6,8  
Seq#:19; N Pos. 8  
Seq#:20; N Pos. 2,4,8

**VERIFICATION SUMMARY**

DATE: 05/14/2003

PATENT APPLICATION: . US/09/486,623B

TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0